## **ABSTRACT**

An apparatus and method for measuring the fatigue strength and fatigue damage of structures and predicting the service life remaining in the structure being tested. The apparatus is a specially designed fatigue gauge that contains breakable ligaments of either variable length to measure fatigue strength or fatigue damage of metallic, polymeric and composite materials or the same length but different composition to measure the fatigue strength and fatigue damage of certain composite materials.

SEQUENCE LISTING
Not Applicable